



Sequence Listing

<110> P. Mickey Williams
Mary E. Gerritsen

<120> PROMOTION OR INHIBITION OF ANGIOGENESIS AND
CARDIOVASCULARIZATION BY TUMOR NECROSIS FACTOR
LIGAND/RECEPTOR HOMOLOGS

<130> P1765R1

<140> US 09/613,972

<141> 2000-07-11

<150> US 60/143,304

<151> 1999-07-12

<160> 22

<210> 1

<211> 1008

<212> DNA

<213> Homo sapiens

<400> 1

cacgcacttc acctgggctg ggattctcag gtcataaacg gtcccagcca 50
cctccgggca gggcgggtga ggacggggac ggggcgtgtc caactggctg 100
tgggctcttg aaaccgagc atggcacagc acggggcgat gggcgcgttt 150
cgggccctgt gcggcctggc gctgctgtgc gcgctcagcc tgggtcagcg 200
ccccaccggg ggtcccgggt gcggccctgg gcgcctcctg cttgggacgg 250
gaacggacgc gcgctgctgc cgggttcaca cgacgcgctg ctgccgcat 300
taccggggcg aggagtgtg ttccgagtgg gactgcatgt gtgtccagcc 350
tgaattccac tgcggagacc cttgctgcac gacctgccg caccaccctt 400
gtcccccagg ccagggggta cagtcccagg ggaaattcag ttttggttc 450
cagtgtatcg actgtgctc ggggaccttc tccgggggac acgaaggcca 500
ctgcaaacct tggacagact gcacccagtt cgggtttctc actgtgttcc 550
ctgggaacaa gaccacaac gctgtgtgcg tcccagggtc cccgccggca 600
gagccgcttg ggtggctgac cgctgctcctc ctggccgtgg ccgctgcgt 650

cctcctcctg acctcgcccc agcttggact gcacatctgg cagctgagga 700
 gtcagtgcac gtggccccga gagaccacgc tgctgctgga ggtgccgccg 750
 tcgaccgaag acgccagaag ctgccagttc cccgaggaag agcggggcga 800
 gcgatcggca gaggagaagg ggcggctggg agacctgtgg gtgtgagcct 850
 ggccgtcctc cggggccacc gaccgcagcc agccccctcc caggagctcc 900
 ccaggccgca ggggctctgc gttctgctct gggccgggcc ctgctcccct 950
 ggcagcagaa gtgggtgcag gaaggtggca gtgaccagcg ccctggacca 1000
 tgcagttc 1008

<210> 2
 <211> 723
 <212> DNA
 <213> Homo sapiens

<400> 2
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 gctgctgtgc gcgctcagcc tgggtcagcg cccaccggg ggtcccgggt 100
 gcggccctgg gcgcctcctg cttgggacgg gaacggacgc gcgctgctgc 150
 cgggttcaca cgacgcgctg ctgccgcgat taccggggcg aggagtgctg 200
 ttccgagtgg gactgcatgt gtgtccagcc tgaattccac tgcggagacc 250
 cttgctgcac gacctgccgg caccaccctt gtcccccagg ccagggggta 300
 cagtcccagg ggaaattcag ttttggttcc cagtgtatcg actgtgcctc 350
 ggggaccttc tccggggggc acgaaggcca ctgcaaacct tggacagact 400
 gcaccagtt cgggtttctc actgtgttcc ctgggaacaa gaccacaaac 450
 gctgtgtgcg tcccagggtc cccgccggca gagccgcttg ggtggctgac 500
 cgtcgtcctc ctggccgtgg ccgcctgcgt cctcctcctg acctcggcc 550
 agcttggact gcacatctgg cagctgagga gtcagtgcac gtggccccga 600
 gagaccacgc tgctgctgga ggtgccgccg tcgaccgaag acgccagaag 650
 ctgccagttc cccgaggaag agcggggcga gcgatcggca gaggagaagg 700
 ggcggctggg agacctgtgg gtg 723

<210> 3
 <211> 241
 <212> PRT
 <213> Homo sapiens

<400> 3
 Met Ala Gln His Gly Ala Met Gly Ala Phe Arg Ala Leu Cys Gly
 1 5 10 15
 Leu Ala Leu Leu Cys Ala Leu Ser Leu Gly Gln Arg Pro Thr Gly
 20 25 30
 Gly Pro Gly Cys Gly Pro Gly Arg Leu Leu Leu Gly Thr Gly Thr
 35 40 45
 Asp Ala Arg Cys Cys Arg Val His Thr Thr Arg Cys Cys Arg Asp
 50 55 60
 Tyr Pro Gly Glu Glu Cys Cys Ser Glu Trp Asp Cys Met Cys Val
 65 70 75
 Gln Pro Glu Phe His Cys Gly Asp Pro Cys Cys Thr Thr Cys Arg
 80 85 90
 His His Pro Cys Pro Pro Gly Gln Gly Val Gln Ser Gln Gly Lys
 95 100 105
 Phe Ser Phe Gly Phe Gln Cys Ile Asp Cys Ala Ser Gly Thr Phe
 110 115 120
 Ser Gly Gly His Glu Gly His Cys Lys Pro Trp Thr Asp Cys Thr
 125 130 135
 Gln Phe Gly Phe Leu Thr Val Phe Pro Gly Asn Lys Thr His Asn
 140 145 150
 Ala Val Cys Val Pro Gly Ser Pro Pro Ala Glu Pro Leu Gly Trp
 155 160 165
 Leu Thr Val Val Leu Leu Ala Val Ala Ala Cys Val Leu Leu Leu
 170 175 180
 Thr Ser Ala Gln Leu Gly Leu His Ile Trp Gln Leu Arg Ser Gln
 185 190 195
 Cys Met Trp Pro Arg Glu Thr Gln Leu Leu Leu Glu Val Pro Pro
 200 205 210
 Ser Thr Glu Asp Ala Arg Ser Cys Gln Phe Pro Glu Glu Glu Arg
 215 220 225

Gly Glu Arg Ser Ala Glu Glu Lys Gly Arg Leu Gly Asp Leu Trp
 230 235 240

Val

<210> 4
 <211> 951
 <212> DNA
 <213> Homo sapiens

<400> 4
 ggcacagcac ggggcatg ggcggtttcg ggccctgtgc ggccctggcgc 50
 tgctgtgcgc gctcagcctg ggtaagcgcc ccaccggggg tcccgggtgc 100
 ggccctgggc gctcctgct tgggacggga acggacgcgc gctgctgccg 150
 gggtcacacg acgcgtgct gccgcgatta cccgggagag gagtgcgtgtt 200
 ccgagtggga ctgcatgtgt gtccagcctg aattccactg cggagaccct 250
 tgctgcacga cctgccggca ccacccttgt ccccaggcc agggggtaca 300
 gtcccagggg aaattcagtt ttggcttcca gtgtatcgac tgtgcctcgg 350
 ggaccttctc cggggggcac gaaggccact gcaaaccttg gacagactgc 400
 acccagttcg ggtttctcac tgtgttccct ggggaacaag acccacaacg 450
 ctgtgtgcgt cccagggtcc ccgccggcag agccgcttgg gtggtgacc 500
 gtgcctctcc tggcgtggc cgctgcgtc tcctcctgac ctggcccgag 550
 cttggactgc acatctggca gctgaggagt cagtgcattg ggccccgagg 600
 tctgtcacag cctggtgcgg ggaggtggga gcatggctgc ctgctgacg 650
 tggccccct gcatagacct agctgctgct ggaggtgccg ccgtcgaccg 700
 aagacgccag aagctgccag tccccgagg aagagcgggg cgagcgatcg 750
 gcagaggaga aggggcggct gggagacctg tgggtgtgag cctggctgtc 800
 ctccggggcc accgaccgca gccagccct cccaggagc tcccaggcc 850
 gcaggggctc tgcgttctgc tctgggccgg gccctgctcc cctggcagca 900
 gaagtgggtg caggaagggt gcagtgaacca gcgccctgga ccatgcagtt 950

c 951

<210> 5

<211> 28

<212> DNA

<213> Artificial sequence

<220>

<223> Sequence is synthesized.

<400> 5

ggcacagcac ggggcgatgg gcgcgttt 28

<210> 6

<211> 19

<212> DNA

<213> Artificial sequence

<220>

<223> Sequence is synthesized.

<400> 6

cacagcacgg ggcgatggg 19

<210> 7

<211> 40

<212> DNA

<213> Artificial sequence

<220>

<223> Sequence is synthesized.

<400> 7

agcctgggtc agcgcacccac cgggggtccc ggggtgcggcc 40

<210> 8

<211> 17

<212> DNA

<213> Artificial sequence

<220>

<223> Sequence is synthesized.

<400> 8

cgctgaccca ggctgag 17

<210> 9

<211> 40

<212> DNA

<213> Artificial sequence

<220>

<223> Sequence is synthesized.

<400> 9

gaggagtgtt gttccgagtg ggactgcatg tgtgtccagc 40

<210> 10

<211> 27

<212> DNA

<213> Artificial sequence

<220>

<223> Sequence is synthesized.

<400> 10

gaaggtcccc gaggcacagt cgataca 27

<210> 11

<211> 18

<212> DNA

<213> Artificial sequence

<220>

<223> Sequence is synthesized.

<400> 11

gctctgcgtt ctgctctg 18

<210> 12

<211> 24

<212> DNA

<213> Artificial sequence

<220>

<223> Sequence is synthesized.

<400> 12

ctggtcactg ccaccttcct gcac 24

<210> 13

<211> 1964

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> 1857, 1875

<223> unknown base

<400> 13

cagctctcat ttctccaaaa atgtgtttga gccacttgga aaatatgcct 50

ttaagccatt caagaactca aggagctcag agatcatcct ggaagctgtg 100
 gctcttttgc tcaatagtta tgttgctatt tctttgctcc ttcagttggc 150
 taatctttat ttttctccaa ttagagactg ctaaggagcc ctgtatggct 200
 aagtttggac cattaccctc aaaatggcaa atggcatctt ctgaacctcc 250
 ttgcgtgaat aaggtgtctg actggaagct ggagatactt cagaatggct 300
 tatatttaat ttatggccaa gtggctccca atgcaaaacta caatgatgta 350
 gctccttttg aggtgcggct gtataaaaac aaagacatga tacaaaactct 400
 aacaaacaaa tctaaaatcc aaaatgtagg agggacttat gaattgcatg 450
 ttggggacac catagacttg atattcaact ctgagcatca ggttctaaaa 500
 aataatacat actgggggat catcttacta gcaaattccc aattcatctc 550
 ctagagactt gatttgatct cctcaattccc ttcagcacat gtagaggtgc 600
 cagtgggtgg attggaggga gaagatatcc aatttctaga gtttgtctgt 650
 ctacaaaaat caacacaaac agaactcctc tgcacgtgaa ttttcatcta 700
 tcatgcctat ctgaaagaga ctcaggggaa gagccaaaga cttttggttg 750
 gatctgcaga aatacttcat taatccatga taaaacaaat atggatgaca 800
 gaggacatgt gcttttcaaa gaatctttat ctaattcttg aattcatgag 850
 tggaaaaatg gagttctatt cccatggaag atttacctgg tatgcaaaaa 900
 ggatctgggg cagtagcctg gctttgttct catattcttg ggtgctgta 950
 attcattctt ctcatactcc catcttctga gaccctccca ataaaaagta 1000
 gactgatagg atggccacag atatgcctac cataccctac tttagatatg 1050
 gtggtgtag aagataaaga acaatctgag aactattgga atagaggtac 1100
 aagtggcata aaatggaatg tacgctatct ggaaatttct cttggtttta 1150
 tcttcctcag gatgcagggt gctttaaaaa gccttatcaa aggagtcatt 1200
 ccgaaccctc acgtagagct ttgtgagacc ttactgttgg tgtgtgtgtc 1250
 taaacattgc taattgtaaa gaaagagtaa ccattagtaa tcattaggtt 1300

sub
 e/h

taaccccaga atggtattat cattactgga ttatgtcatg taatgattta 1350
 gtatttttag ctagctttcc acagtttgca aagtgtttc gtaaaacagt 1400
 tagcaattct atgaagttaa ttgggcaggc atttggggga aaatttttagt 1450
 gatgagaatg tgatagcata gcatagccaa ctttcctcaa ctcataggac 1500
 aagtgactac aagaggcaat gggtagtccc ctgcattgca ctgtctcagc 1550
 tttagaattg ttatttctgc tatcgtgtta taagactcta aaacttagcg 1600
 aattcacttt tcaggaagca tattccccctt tagcccaagg tgagcagagt 1650
 gaagctacaa cagatctttc ctttaccagc acactttttt ttttttttcc 1700
 tgctgaatc agggagatcc aggatgtgtt tcaggccaaa tcccaaccaa 1750
 attccccctt tcactttgca gggcccatct tagtcaaagt tgctaacttc 1800
 taaaataata aatagcacta attcaaaatt tttggaatct taaattagct 1850
 acttgcnggt tgcttgttga aaggnatata atgattacat tgtaaacaaa 1900
 tttaaaatat ttatggatat ttgtgaaaag ctgcattatg ttaaataata 1950
 ttacatgtaa agct 1964

<210> 14
 <211> 177
 <212> PRT
 <213> Homo sapiens

<400> 14
 Met Cys Leu Ser His Leu Glu Asn Met Pro Leu Ser His Ser Arg
 1 5 10 15
 Thr Gln Gly Ala Gln Arg Ser Ser Trp Lys Leu Trp Leu Phe Cys
 20 25 30
 Ser Ile Val Met Leu Leu Phe Leu Cys Ser Phe Ser Trp Leu Ile
 35 40 45
 Phe Ile Phe Leu Gln Leu Glu Thr Ala Lys Glu Pro Cys Met Ala
 50 55 60
 Lys Phe Gly Pro Leu Pro Ser Lys Trp Gln Met Ala Ser Ser Glu
 65 70 75
 Pro Pro Cys Val Asn Lys Val Ser Asp Trp Lys Leu Glu Ile Leu
 80 85 90

Gln	Asn	Gly	Leu	Tyr	Leu	Ile	Tyr	Gly	Gln	Val	Ala	Pro	Asn	Ala
			95						100					105
Asn	Tyr	Asn	Asp	Val	Ala	Pro	Phe	Glu	Val	Arg	Leu	Tyr	Lys	Asn
			110						115					120
Lys	Asp	Met	Ile	Gln	Thr	Leu	Thr	Asn	Lys	Ser	Lys	Ile	Gln	Asn
			125						130					135
Val	Gly	Gly	Thr	Tyr	Glu	Leu	His	Val	Gly	Asp	Thr	Ile	Asp	Leu
			140						145					150
Ile	Phe	Asn	Ser	Glu	His	Gln	Val	Leu	Lys	Asn	Asn	Thr	Tyr	Trp
			155						160					165
Gly	Ile	Ile	Leu	Leu	Ala	Asn	Pro	Gln	Phe	Ile	Ser			
			170						175					

<210> 15
 <211> 42
 <212> DNA
 <213> Artificial sequence

<220>
 <223> Sequence is synthesized.

<400> 15
 tgtaaaacga cggccagttt ctctcagaga aacaagcaaa ac 42

<210> 16
 <211> 43
 <212> DNA
 <213> Artificial sequence

<220>
 <223> Sequence is synthesized.

<400> 16
 caggaaacag ctatgaccga agtggaccaa aggtctatcg cta 43

<210> 17
 <211> 20
 <212> DNA
 <213> Artificial sequence

<220>
 <223> Sequence is synthesized.

<400> 17
 ccactgaaac cttggacaga 20

<210> 18
<211> 27
<212> DNA
<213> Artificial sequence

<220>
<223> Sequence is synthesized.

<400> 18
cccagttcgg gtttctcact gtgttcc 27

<210> 19
<211> 21
<212> DNA
<213> Artificial sequence

<220>
<223> Sequence is synthesized.

<400> 19
acagcgttgt gggctcttggt c 21

<210> 20
<211> 38
<212> DNA
<213> Artificial sequence

<220>
<223> Sequence is synthesized.

<400> 20
gacgacaagc atatgttaga gactgctaag gagccctg 38

<210> 21
<211> 34
<212> DNA
<213> Artificial sequence

<220>
<223> Sequence is synthesized.

<400> 21
tagcagccgg atcctaggag atgaattggg gatt 34

<210> 22
<211> 24
<212> PRT
<213> Artificial sequence

<220>

<223> Sequence is synthesized.

over
CS
<400> 22

Met Gly His His His His His His His His His His Ser Ser Gly
1 5 10 15

His Ile Asp Asp Asp Asp Lys His Met
20
